

## CONTRASTING LOCAL GOVERNMENT RESPONSES TO A TORNADO DISASTER IN TWO COMMUNITIES

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*In the United States, immediate post-impact response activities in natural disasters are normally the responsibility of local government. Federal and state governments provide supplemental assistance, primarily in the form of financial subsidies for long-term recovery. An entirely different pattern of disaster response emerged as two adjacent communities struggled to deal with the effects of the same damaging tornado. In one community the response was directed entirely by the city manager, but in the other emergency activities were personally directed by the state's governor without any pretext of local control. This paper examines the formal structure of the two local governments and their histories of inter-governmental relationships with the state in an effort to account for the unique pattern.*

The role of local government in natural disasters is a topic of long-standing interest in the field of disaster research. After an almost exclusive focus on the emergency period, attention in recent years broadened to include examinations of local government during both pre-disaster (e.g., Diggins et al. 1979) and recovery phases (e.g., Mileti 1975; Wolensky 1977; Wolensky and Miller 1981) as well. What municipalities



are organized to do on a daily basis--to provide selected public services--often renders them ill-equipped to cope with the intergovernmental complexities of disaster response (Petak 1985; Wolensky 1986). During the rehabilitation and recovery phases, local governments frequently experience dissatisfaction and hostility from citizens, conflict with state and federal agencies (May 1985; Mushkatel and Weschler 1985), and competition for policy direction from emergent groups (Wolensky 1984; see also Stalling and Quarantelli 1985).

Local government generally earns high marks for its efforts during the emergency period, however. Provision and coordination of such emergency services as search and rescue (Drabek 1985), fire suppression, traffic control, debris removal, security, and community morale-building are provided by various appointed and elected local officials (Dynes 1970; Wenger and Parr 1969; for a detailed example see Taylor et al. 1970). Control over initial disaster response activities in the United States is best described as decentralized (cf. McLuckie 1975) with lead responsibility falling to local governments (Drabek 1985, p. 85). Even on those few occasions when municipal government falters momentarily, representatives of outside agencies try to preserve the public appearance of local control and direction (e.g., Moore 1958, p. 15; Anderson 1969).

We discovered an exception to this pattern of local control over immediate post-impact disaster response activities. Of two adjacent communities struck unexpectedly by the same late-season tornado, one exhibited the typical American pattern with direction of emergency activities firmly in the hands of the city manager. Operational control in the second community, however, was assumed early on and held throughout the emergency period by the governor of the state who personally directed the disaster response activities of both local and state agencies.

The contrast between the responses of these municipal governments under very similar circumstances provides a unique opportunity to explore the interrelationships between characteristics of local government and natural disasters. As we sifted through materials gathered on the two cases, we realized that what initially appeared abnormal to us--a state governor in charge of local government during the emergency period--was really in keeping with previous intergovernmental relations

between these local and state governments. We will attempt to show that the differences between the two cities are consistent with the continuity hypothesis (Quarantelli and Dynes 1977, pp. 34-35) whereby post-impact activities and relationships are seen as extensions of rather than departures from pre-impact processes.

Our article proceeds as follows. First we will describe selected characteristics of the two communities at the time of the tornado. Next we will describe the pattern of damage in the two communities as well as the disaster response activities of each. Then, after highlighting the unique features of the governor-led response in the one community, we will suggest some reasons for the differences between the two responses. Finally we will propose some propositions that seem consistent with our findings.

## METHODS AND DESCRIPTION OF THE TWO CASES

The design of our study is that of a comparative case study with the governor-directed response in a community that we will call Oldtown Falls contrasted with the more typical pattern of locally-controlled disaster response in an adjacent community we will call Oldtown. We use pseudonyms for the names of both communities to maintain the anonymity of our respondents. Methods of data collection are those conventionally used in qualitative studies of disasters (see Killian 1956; Dynes et al. 1967; Drabek 1970b). The primary source of data is field notes taken during in-depth personal interviews with key informants. These are supplemented with written responses to questions submitted to the heads of various agencies and with a variety of public documents.

Our discussion of the responses of the two local governments is based upon materials from the following sources. Twelve in-depth interviews were conducted with key actors in the two communities including the mayor of Oldtown Falls, the city manager of Oldtown, and heads of the police, fire, planning, public works, and building departments in each community. In addition, a half dozen or so telephone conversations took place with other representatives of local government in Oldtown Falls to clarify and expand upon points made during the personal interviews. Additional materials were obtained from documentary sources such as minutes of meetings of the two city councils, after-action reports



prepared by various city departments, records of each City's building department, annual reports and annual fiscal reports of the municipalities, a newsletter published by the City of Oldtown to provide information to disaster victims, and a written report prepared by the staff of the one-stop disaster assistance center.

Materials on the activities of the state government were gathered through six in-depth interviews conducted with two of the governor's aides, the governor's spouse who accompanied the governor throughout the emergency period, the governor's press secretary, the coordinating officer for the state disaster agency, and the head of the state's construction industry association who assisted the governor throughout. Written responses to specific questions were also obtained from the heads of ten state agencies involved in this disaster. Other information came from documents such as the published proceedings of the state legislature; after-action reports prepared by the state disaster office, the state transportation department, and the state's office of policy and management; and other annual reports.

The two federal agencies most heavily involved in disaster activities were the Federal Emergency Management Agency (FEMA) and the Small Business Administration (SBA). Three in-depth interviews were conducted with federal representatives, one from FEMA and two from the regional office of the SBA. The FEMA coordinating officer was ill at the time of these interviews, so another official from the regional FEMA office who had been involved in this disaster was interviewed. Added to these were written responses to questions submitted to the regional FEMA director, FEMA utilization and financial reports, and SBA financial reports.

These primary materials were further supplemented with those from two other sources. One was participant observation by the junior author who at the time of this disaster was in direct contact with FEMA representatives at the disaster assistance center. As an administrator in a local government in a suburb of the state capital, he was responsible for helping obtain disaster assistance for businesses in his city. The second source was published reports in two daily, three weekly, and two regional newspapers serving the two disaster-stricken communities. These newspapers were monitored for a period of approximately 18 months

Oldtown and Oldtown Falls are located in the same state in the northeastern United States. Their city centers are approximately four miles apart, and each is roughly ten miles from the state capital. Oldtown, the larger of the two (1980 population 25,000), has a local government of manager-council form employing 210 people with revenues of \$715 and expenditures of \$706 per capita for the fiscal year prior to the storm. Oldtown Falls (1980 population 12,000) has a mayor-council-commission form of government employing 98 people with per capita revenues and expenditures before the disaster of \$775 and \$774, respectively. Except for these differences in size and in the form of government, the two communities are nearly identical in terms of other characteristics such as ethnic population, household income, housing stock, and labor force composition.

Neither local government had an emergency plan specific to natural disasters when the tornado struck. State law mandated only that cities prepare and maintain an emergency plan for nuclear attack. Natural disaster planning at the state level was more extensive, however. In terms of previous disaster experience, officials interviewed in both Oldtown and Oldtown Falls mentioned only a recent ice storm and blizzard. (Interestingly in light of the report to follow, whereas Oldtown used its own personnel and equipment to open icy, snow-clogged streets, Oldtown Falls contracted with the state for snow and ice removal in its jurisdiction.)

Oldtown and Oldtown Falls were both hit by the same F/4 tornado that struck unexpectedly in the early fall. Total damage statewide consisted of three killed and 400 injured with property damage, including business losses, in excess of \$250 million. The bulk of the damage occurred in Oldtown and Oldtown Falls, although there was some scattered damage in other communities including suburbs of the state capital. While the effects of the tornado were quite severe in both communities, the pattern of losses differed somewhat between them. Damage in Oldtown was more extensive to residential property and to public facilities. Two-hundred forty-three homes were damaged or destroyed, and 100 families were left homeless. Direct losses to residences totaled \$15 million. An additional \$3 million in damages occurred to public buildings, streets, and bridges. In Oldtown Falls, damage was



damaged or destroyed with losses estimated to be \$140 million. Ten homes were damaged and three families left homeless while damage to public facilities totaled \$40,000.

In general, both communities were severely damaged in this disaster. Both faced similar problems immediately after impact such as search and rescue, damage assessment, debris clearance, infrastructure restoration, traffic control, security, and morale building. While differences in the type of loss and destruction were important during the recovery period, the initial post-impact problems encountered by the two local governments were comparable. Despite facing similar challenges, their responses were quite different.

## THE TWO LOCAL GOVERNMENTS IN DISASTER

### Oldtown

Local government response in Oldtown during the emergency period was so similar to the typical pattern described in the disaster literature that we will provide only enough detail to highlight the uniqueness of the response in Oldtown Falls. The first indication that something had happened did not immediately suggest to those at Oldtown's city hall that the "something" was a devastating tornado. Midafternoon reports that the roof of an auto repair garage had fallen in, setting off an automatic fire alarm, and that a senior citizens' minibus had overturned seemed at first to be two unfortunate but unrelated incidents. As the city manager and the public works director drove out to inspect the two sites, however, the severity of the storm and accompanying flooding became vividly apparent--their city-owned vehicle stalled in flood waters, stranding the pair for fifteen minutes.

After being rescued, the city manager notified both the police and public works departments of the situation and requested that they call in off-duty personnel. He began to prepare a plan of action for all city departments. The plan centralized responsibility for the disaster response in the hands of the city manager. Under his direct supervision, City departments would carry out such activities as search and rescue, damage assessment, traffic control, and debris removal as well as house and feed disaster victims. Only after inspecting the damage in Oldtown

precipitate the scope of the disaster. By then the city's efforts were well under way.

As state police and national guard personnel arrived during the second and third days, they were assigned to assist municipal departments in traffic control, security, and debris clearance. Fire departments from surrounding communities also assisted under existing mutual aid agreements.

This pattern of interorganizational relationships remained unchanged during the next two weeks. Debris clearance, repair of the city's infrastructure, provision of temporary housing, and advice to victims on financial matters and other forms of disaster counseling were all tasks carried out by local government in Oldtown. In addition to the usual presence of military units and extra-local personnel from the utility companies, rehabilitation activities in Oldtown were augmented by a large number of volunteer laborers provided through local labor unions and organized under an emergent coordinating structure called the Tornado Emergency Construction Task Force. Strictly speaking, this task force more closely resembled what Quarantelli (1966, pp. 12-14) and Dynes (1970, pp. 145-146) call an "extending" organization rather than an emergent group, although it is far from being a pure type. As was the case during the emergency period, the activities of all these groups were coordinated with those of Oldtown's city departments by the city manager. Long-term financial, mental health, and other services were later provided by various state and federal agencies operating out of the one-stop disaster assistance center.

### Oldtown Falls

The response to this disaster in Oldtown Falls was very different from the familiar pattern just described. In fact, Oldtown Falls is an exception to the general pattern of local government response found in the literature. The episode began routinely. The storm had blown off the roof of a local motel triggering an automatic alarm at the city's fire department headquarters. The chief of police, noting the severity of damage as he approached the motel, called the mayor to report the storm's effects and to ask for his authorization to dispatch public works crews in the area.



mediately called the director of the state disaster office and requested assistance. State police began arriving within thirty minutes, and within three hours the governor and several heads of state agencies had also arrived. By dawn the next morning, the governor had taken over complete operational control of disaster response activities in Oldtown Falls.

Agencies and departments of city government worked independently and autonomously in the intervening several hours. The mayor chose not to assume overall control of the City's efforts, stating in a later interview that he had not wanted to interfere with the operation of his departments since he felt "they knew what to do without me telling them." Gradually the efforts of city departments were integrated with those of the state agencies working in the community and by the morning after impact were under the personal direction of the governor.

As the days passed, state agencies assumed more and more responsibility for local emergency response activities such as security, traffic control, and debris clearance. The governor personally supervised these activities through daily staff meetings. The state disaster office early on had opened a disaster assistance center to coordinate aid to storm victims, and the governor met personally with several victims during the first few days, listening to their stories and pledging assistance.

One week after the tornado struck, all city departments in Oldtown Falls had ended their disaster activities. State national guard and department of transportation personnel, however, continued to handle debris clearance for several more days. The state department of labor took charge of processing claims for temporary unemployment compensation, and the department of economic development moved in to assist local businesses in applying for federal loans and grants with which they could reopen. As long-term recovery efforts got into full swing following a major disaster declaration by the President, both FEMA and SBA joined the list of active participants at the disaster assistance center which had been established in Oldtown Falls.

#### CONTINUITY OF CENTRALIZED vs. DECENTRALIZED LOCAL GOVERNMENT STRUCTURES

Why did the short-term disaster response in Oldtown Falls not follow the typical pattern repeatedly found in the United States as had the

one in Oldtown? While materials from a comparative case study such as this do not prove or disprove any hypotheses, they can be used to identify from among the available candidates those hypotheses that appear most plausible (i.e., logically consistent with the significant features of the two cases) and worthy of continued examination. We suggest that the uniqueness of the state-directed emergency response in Oldtown Falls is more apparent than real and may be explained by the continuity of daily local government operations, of the formal structure of local government, and of pre-disaster relationships between local and state governments.

One set of hypotheses that initially might seem to fit the details of the two cases is that which we shall call stress theory (Haas and Drabek 1973; see also the earlier conceptualizations in Drabek 1968, 1970a). Stress is defined as a discrepancy between demands placed upon a social system as a result of suddenly altered conditions in the system's environment and that system's capacity for response. The greater the stress (i.e., the greater the discrepancy between demands and capabilities), the more likely the system will undergo alterations or changes by increasing capacity, reducing demands, or both (Haas and Drabek 1973, pp. 252-259; also Mileti et al. 1975, pp. 78-82). We question the plausibility of stress theory as an adequate account of the differences between Oldtown Falls and Oldtown, however. Comparison of the two cases exposes four aspects of this theory that limit its usefulness.

First, stress theory contains hypotheses that are essentially linear in form. That is, they make no allowance for the possibility of a qualitatively different relationship between stress and organizational alteration at extreme levels of stress. It may be that beyond a certain point increasing amounts of stress are correlated with organizational inactivity rather than activity. In Oldtown Falls, in other words, the scale of disaster may have been so great relative to the capacity of municipal government that a kind of "organizational resignation" took place (cf. Forman 1963 for a parallel argument at the individual level).

We seriously doubt that this was the case, however. The overwhelming mass of evidence from social science studies of natural disasters shows that elements of American culture define as appropriate an active rather than passive response to disasters (see reviews such as Fritz 1961, 1968; Quarantelli and Dynes 1972). Furthermore, passivity and



resignation would not only be out of character, they also do not fit the data from Oldtown Falls. Local organizations did respond. It is only that their control and coordination passed into the personal hands of the state's governor.

Second, the measurement of stress remains too imprecise to allow meaningful comparisons of the levels of stress present. We cannot say, for example, that in absolute terms the amount of stress was greater on the municipal government in Oldtown Falls than on that in Oldtown. The relative capacities of the two governments are nearly identical; the number of municipal employees per resident was 0.006 for Oldtown and 0.004 for Oldtown Falls, for instance. The demands on the two governments during the immediate post-impact period also seem comparable, certainly no greater in Oldtown Falls than in Oldtown. Damage in Oldtown Falls was primarily to commercial structures resulting in lost wages and income; in Oldtown damage was primarily to residences, public buildings, and the infrastructure, creating demands that were at least comparable immediately after impact.

Third, stress theory is inconsistent in distinguishing between stress as an objective phenomenon (i.e., something characteristic of a social system) and as a subjective phenomenon (i.e., something which actors in ongoing situations experience). Our evaluation of similarities and differences in damage and loss occurred after the fact. It is not at all clear that in the first few hours following the tornado the problems looked any less severe to officials in Oldtown than they did to those in Oldtown Falls. Whatever the objective levels of stress have been, the subjectively experienced stress following impact does not seem to have been sufficiently different to explain the contrasting governmental responses.

A fourth weakness of stress theory hypotheses is the lack of precision in measuring the dependent variable, system alteration. This makes it difficult to distinguish between change and continuity. Was the disaster response in Oldtown Falls innovative or was the response in Oldtown? Which community displayed greater alterations? While local government activities in each community could not be described as business as usual, there is a sense in which each response was perfectly "in character" with its structure and previous history.

Wolensky (1986) recently examined the weaknesses of local governments in the United States as they confront the demands of disasters and

suggests that these arise from three sources: the political culture which defines a limited role for local government as the provider of selected public services; the relatively small resource base with which local governments operate; and a bifurcated local power structure, one in which influence over public policy is divided between a civic and business sector on the one hand and office holders and public administrators on the other. Oldtown and Oldtown Falls are similar on all three characteristics. They are both characterized by a minimalistic service orientation (somewhat more pronounced in Oldtown Falls, significantly) and a small resource base (not appreciably different relative to their population sizes) with power divided between governmental and civic sectors.

The two communities differ markedly in one important respect, however. Differences in the formal structure of local government create very different distributions of power *within* the governmental sectors of the two communities. In Oldtown local government is the manager-council type. An elected city council meets, bi-weekly to set policy, and a professional city manager, hired by and serving at the pleasure of the council, is responsible for administering the daily affairs of the city. Municipal departments are headed by fulltime administrators appointed by and reporting directly to the city manager. Although power is in one sense shared under this structural arrangement, day-to-day control over municipal services is centralized in the office of the city manager.

Oldtown Falls has a quite different formal governmental structure. Its government is the mayor-council-commission type. Rather than the strong mayor form normally characteristic of this type, however, the powers of the mayor in Oldtown Falls have been circumscribed by the delegation of various responsibilities to several boards and commissions. The mayor has direct supervisory responsibility only over public works and general administrative services. Police, fire, and other municipal departments fall under the jurisdiction of separately elected commissions. Only the chief of police is a fulltime administrator. Power over day-to-day operations is decentralized among the semi-autonomous components of local government in Oldtown Falls.

Rather than differences in levels of stress, we think the principal reason for the differences between Oldtown and Oldtown Falls lies in the fact that the structure of government facilitated the concentration of disaster responsibility in the former but mitigated against it in the lat-



ter. A further indication is the fact that certain contradictions and ambiguities in the legal authorizations in Oldtown were resolved after the disaster giving the city manager even greater control over local resources in the event of a future emergency. Power was more extensively decentralized in Oldtown Falls, divided both between the governmental and civic sectors as well as within the governmental sector itself. The mayor of Oldtown Falls shared everyday responsibility with a complex array of boards and commissions. The fact that he was accustomed to a limited role may in part account for his appearing to be comfortable with his publicly visible secondary status while the governor was in charge of the city's disaster response. Using concepts suggested by Thompson and Hawkes (1962), differences in the pre-disaster structures of the two municipal governments made it more likely that computational decision making during the emergency period would emerge in Oldtown but not in Oldtown Falls.

### CONTINUITY OF LOCAL-STATE GOVERNMENTAL RELATIONSHIPS

Explaining why local control was maintained in one community but not in the other does not explain why the state assumed control of local disaster response activities. Once again the responses of the two cities were in character with the past history of their relationships with state government.

Oldtown Falls had a long history of working arrangements with the state in areas where local government did not attempt to directly provide a public service. The municipality would routinely contract with the state to perform these functions. One such function was city planning. Another apparently was emergency preparedness and response as illustrated by its previous experience with a severe ice storm and blizzard in which it contracted with the state highway department to clear snow and ice from its streets.

In the aftermath of the tornado, Oldtown Falls in effect "contracted" with the state for management of its emergency response activities. The mayor decided early on that the scope of the disaster was beyond his capacity to manage. State officials, including the governor, who arrived at the scene soon after impact were confronted with the necessity of com-

pleting certain immediate activities such as traffic control and debris clearance before other activities they were more accustomed to carrying out (such as arranging for federal disaster relief, providing financial and other supplemental resources available under state law, etc.) could begin.

While its past history of intergovernmental relations may have predisposed the municipality to lean toward the state under these circumstances, why did the governor take charge personally? Several factors appear to have been important, although we have no way of knowing which if any were decisive. State law made it legally permissible for the governor to take overall control of disaster operations under emergency powers regardless of jurisdictional venue. Oldtown Falls is situated only 14 miles from the state capital. On the surface neither of these factors distinguish between the situation confronted by Oldtown Falls and that faced by Oldtown. However, from the state's perspective, it was Oldtown Falls that had reported the tornado and sought assistance. Oldtown had not yet been heard from. It seemed therefore, that there was a single disaster and that it was concentrated in Oldtown Falls. The state moved quickly to establish a base of operations there. Only later did state officials become aware that Oldtown had also been hard hit by the tornado. By that time Oldtown's own local response was well under way. State resources remained based in Oldtown Falls.

The governor had personally been involved in previous local emergencies, although not to the extent described here. Whether this was a matter of leadership style or because it was just plain good politics we cannot say. We should also point out that Oldtown Falls is the governor's hometown, although this fact does not seem to have been especially salient at the time. In short, the local-state "partnership" during the emergency period in Oldtown Falls continued in kind if not in degree a long history of working relationships between the two entities as did the contrasting go-it-alone style of Oldtown.

### BENEFITS Vs. COSTS OF THE TWO LOCAL EMERGENCY RESPONSES

We are not implying that either of these two contrasting disaster responses is in some way better than the other. All we have claimed is



that one response is typical of the pattern seen in natural disasters in the United States while the other is not. In fact, the relative benefits and costs of the two different patterns is rather mixed.

A good indicator of the degree to which the disaster responses in the two communities differed is the number of formal legislative decisions related to municipal disaster activities deliberated by their respective city councils. In Oldtown Falls, only two storm-related actions were considered during the three months following the tornado. One was a resolution authorizing appropriation of municipal funds for disaster-related expenses, and the other was a perfunctory ratification of an ordinance making possible property tax reassessment for disaster victims, a local policy that duplicated similar action by the state legislature. In Oldtown, the city council took up 10 pieces of legislation (16 percent of its formal agenda) directly related to the tornado during the ensuing three months. These included a major policy change in emergency powers that clarified the authority of the city manager regarding the use of school district resources, including personnel, in a disaster.

The personal involvement of the governor in Oldtown Falls filled a vacuum in the centralized direction of disaster activities and facilitated the integration of local and state efforts. This by most measures would be counted as a benefit, at least relative to the absence of such centralized coordination. There were some serious costs incurred as a consequence, however. Feeling that the "feds" (ie., federal disaster assistance agencies) were slow to respond, the state established the disaster assistance center, normally a federal action. This center was set up in the "wrong" city as it turned out (see Peter May's [1985, p. 73] discussion of the State of Washington's unhappiness over the choice of location for the disaster assistance center by FEMA after the eruption of the Mount St. Helens volcano). Most of the disaster victims needing some form of aid were in Oldtown rather than Oldtown Falls, a fact that was not obvious when state officials arrived.

In the process of setting up the disaster assistance center, the state also established the hours during which the center would be open and began to ascertain what types of assistance victims were going to need. Federal officials reacted as though their turf had been invaded. They also felt that the state was making commitments to victims that the federal government would later be forced to honor regardless of whether

such commitments were consistent with federal policy. Disputes such as these in the post-impact period further exacerbated pre-disaster inter-governmental hostilities (for an excellent overview of these state-federal conflicts during the recovery period, see May 1985, especially pp. 87-103).

Even more serious were the post-disaster administrative problems created by the governor's direct involvement in the disaster response. While time-consuming steps, delays in decision making, and other forms of "red tape" were eliminated by the governor's on-the-spot problem solving, these came at the expense of the usual accumulation of a bureaucratic "paper trail." After the crisis period had ended, local officials encountered serious problems related to non-certification of expenditures and to suspension of normal regulations such as those requiring that purchases be based upon competitive bidding. Events had to be relived orally so that accounts of verbal agreements and split-second decisions could be written up retrospectively.

The different pattern of local-state responses had different fiscal costs as well (for a general discussion of financing disaster response activities, see Settle 1985). When Oldtown, which had engineered its own locally-based disaster response, sought reimbursement from the state for \$374,209 in tornado-related expenses under a section of state law providing for such reimbursement, the state rejected its claim on the advice of its attorney general due in part to differing legal interpretations of who constitute "local emergency personnel." Since the state in its direct involvement in disaster response activities had not sought funds from the federal government under the Presidential disaster declaration, no reimbursement from that source was possible either. As of the time of this writing, Oldtown's claim is still being adjudicated. The municipality stands to lose \$14.85 per resident as a result of its disaster involvement. In Oldtown Falls where the municipality's direct involvement in disaster activities was less extensive, its direct costs were an estimated \$42,465. Even though its request for reimbursement under the same statutes was also denied by the state, Oldtown Falls stands to lose only \$3.48 per resident.



## CONCLUSION

The response of local government in Oldtown Falls may at first seem similar to another extensively documented in the literature, that of Topeka, Kansas following a tornado in 1966 (see Taylor et al. 1970, especially pp. 128-139). Since Topeka is the state capital, the offices of state and local governments were naturally close together. The governor of Kansas was at the center of things immediately following impact, especially until the mayor of Topeka arrived at the police field command post. As in Oldtown Falls, the formal structure of local government in Topeka encompassed numerous departments, boards, and commissions.

The two cases are only superficially alike, however. In the Topeka case, the governor of Kansas was never directly in charge of local government. While he participated extensively in the group decision-making that took place immediately after impact, he did not assume control of local government. In fact the mayor of Topeka, who previously had delegated much of the day-to-day management of local government, emerged as a strong leader who forged a coalition of responding elements by using his extensive political connections and informal social ties.

One could argue that the difference between the behavior of the mayor of Topeka and the mayor of Oldtown Falls stemmed from differences in their personalities. Whereas the former reportedly had a temperament well suited to the demands of leadership in a synthetic organization ("The fit between personality and role was a good one"; Taylor et al. 1970, p. 133), the latter may appear to have been a passive person who was not capable of asserting himself in a crisis. The governor in the Oldtown Falls disaster, furthermore, was a major national figure well known for bold, decisive action.

We do not believe that the explanation for the unique municipal government response in Oldtown Falls resides in personality variables. The mayor of Oldtown Falls was in fact no less successful a politician in his jurisdiction than were any of the other elected officials we mentioned. Furthermore, from what we know of both cities, it is our belief that an attempt to centralize power—even under disaster conditions—would have been much more difficult in Oldtown Falls than in Topeka.

We believe that the explanation for these contrasting local government responses to disaster lies in underlying structural relationships existing before this disaster. The tornado did not produce a totally new pattern of local activity or of local-state relationships in either community. Rather, it accelerated or intensified processes that were present beforehand. It took place within a framework of contrasting governmental norms, processes, and structures. Therefore, we feel our materials are better subsumed by the so-called continuity hypothesis and its derivatives than by either stress theory or personality theories.

To Wolensky's (1986) list of reasons for the difficulties of local governments in the aftermath of major disasters, we add a further specification. Local governments differ in the structural properties that make responding to disasters more or less difficult. Formal structural arrangements vary in the extent to which power within the governmental sector is concentrated or diffused at the moment of impact. The distribution of power seems to influence both the speed with which interorganizational coordination is achieved and the relative centrality of extra-local assistance organizations in the post-impact period. Stated formally, the more decentralized the structure of power within local government on an everyday basis, the more problematic the post-impact coordination of municipal disaster activities.

Continuity, however, is a substantively neutral concept. It does not identify what is continuing. Close and cooperative working relationships as well as hostile ones can persist into the emergency period. Intergovernmental conflicts in particular, because they take place "backstage" and away from public scrutiny, can carry over into the emergency and post-emergency phases (see the discussion of conflict in natural disasters in Stallings forthcoming). Emergent norms constituting the disaster culture make public expression of such hostilities unlikely. Rather than emerging during the recovery phase, it seems more accurate to say that intergovernmental conflict is a continuation, perhaps on a more escalated level, of disagreements that have been present all along. The more frequent and intense these intergovernmental conflicts prior to disasters, the more likely they are to continue during the emergency, rehabilitation, and recovery phases. The converse hypothesis also is warranted. The more frequent and extensive the pre-disaster history of cooperative working relationships among different governmental entities, the



greater the probability that working relationships during the emergency period will be cooperative as well.

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